



Infrared dispersion of liquid benzylidenemethylamine and o-hydroxybenzylidenemethylamine.

Autorzy

Jerzy P. Hawranek

Władysław Wrzeszcz

Marzena Matusiak-
Kucharska

Maria Pajdowska

Teresa Dziembowska

Rok wydania

2010

Czasopismo

Journal of Molecular
Structure

Numer woluminu

976

Strony

243-248

DOI

10.1016/j.molstruc.2010.03.033

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The spectra of the real and imaginary components of the complex refractive index were determined in the NIR and MIR regions for liquid Benzylidenemethylamine and intramolecularly hydrogen-bonded o-Hydroxybenzylidenemethylamine from transmission studies using a method, which takes into account the dispersion of the refractive index in the Visible range and requires integration over the entire NIR and MIR region.

From these data the spectra of both components of the complex electric permittivity and complex polarizability of both liquids were determined in the Visible, Near Infrared, and Mid Infrared spectral regions (25,000–600 cm^{-1}). The molar vibrational polarization related to various spectral ranges has been determined. The considerable contribution due to the formed intramolecular H-bonding has been evaluated and discussed.

Słowa kluczowe

IR dispersion, Molar vibrational polarization, schiff bases, intramolecular hydrogen-bonding

Adres publiczny

<https://doi.org/10.1016/j.molstruc.2010.03.033>

Strona internetowa wydawcy

<http://www.elsevier.com>